What is claimed is:

1. A fastener for stabilizing multiple bone fragments, comprising;

a first portion configured to extend through the multiple bone fragments; and

a second portion displaceable relative to the first portion and detachably coupleable therewith in a locked position, in which the bone segments are secured.

2. The fastener of claim 1, wherein the first portion has a hollow body provided with an outer surface, and

an inner surface engaging one of opposite ends of the second portion so as to allow displacement of the second portion relative to the first portion to establish the locked position of the fastener,

the inner and outer surfaces of one end of the second portion and the first portion, respectively, being textured to provide frictional engagement between the first and second portions of the fastener.

3. The fastener of claim 2, wherein the other end of the second portion is provided with two arms spaced apart,

the fastener further comprising an anchor pivotally mounted between the arms and pivotal between a rest position, in which the anchor extends parallel to a longitudinal axis of the fastener, and a deployed position, in which the anchor rotates so as to extend perpendicular to the longitudinal axis in diametrically opposite directions.

4. The fastener of claim 3, wherein the anchor is provided with a base surface facing an outer surface of one of the bone segments in the deployed position of the anchor, whereas the fist and second portions are displaceable relative to one another after displacement of the anchor to the deployed position to reach the locked position, wherein the base surface abuts the outer surface of the one bone segment.

5. The fastener of claim 2, wherein the textured outer surface of the first portion includes a plurality of annular ribs or threads.

6. The fastener of claim 1, wherein the first portion is an outer sleeve provided with multiple elongated slots defining therebetween a plurality of angularly spaced legs,

the outer sleeve being configured to receive the second portion displaceable therein to the locked position of the fastener, in which the plurality of legs expand radially outwards to lock in at least one of the bone fragments in the locked position.

7. The fastener of claim 6, wherein the outer sleeve has an inner surface engaging the second portion of the fastener and having a conical region, the plurality of legs being displaceable radially outwards as the second portion advances through the conical region towards the locked position of the fastener.

8. The fastener of claim 7, wherein the second portion is a screw threadingly engaging the inner surface of the first portion, an outer surface of the first portion is formed with ribs or threads.

9. The fastener of claim 7, wherein the first portion is provided with a peripheral surface tapering inwards and configured to engage an outer surface of the first segment in the locked position of the fastener.

10. The fastener of claim 1, wherein the first portion is configured to be an anchoring portion provided with an inner hole, which extends at least along a part of the anchoring portion and has a threaded periphery configured to receive a distal end of the of the second portion.

11. The fastener of claim 10, wherein the distal end of the second portion is configured to threadingly engage the threaded periphery of the anchoring portion and move relative thereto to the locked position.

12. The fastener of claim 11, wherein a proximal end of the second portion has an outer dimension greater than an outer dimension of the anchoring portion and provided with a base surface abutting the outer surface of another one of the bone fragments in the locked position of the fastener.

13. The fastener of claim 10, wherein the anchoring portion has a textured outer periphery provided with annular threads or rib.

14. The fastener of claim 1, wherein the first and second portions of the fastener each have a shank and a head configured to have a larger outer dimension than the shank, the shank of the first portion being hollow and configured to receive the shank of the second portion so that the first and second portions are displaceable relative to one another.

15. The fastener of claim 14, wherein an inner surface of the hollow shank is threaded and meshes with a threaded region of the shank of the second portion to place the first and second portions in the locked position, in which base surfaces of the heads of the first and second portions abut outer surfaces of the multiple bone fragments.

16. The fastener of claim 1, wherein one of the first and second portions has a sleeve and the other portion has a shank dimensioned to be press-fit and locked into the sleeve in the locked position.

17. The fastener of claim 16, wherein the fist and second portions each have a head dimensioned to be larger than an outer dimension of the sleeve and the shank, respectively, and configured to have base surfaces abutting the outer surfaces of the multiple bone fragments in the locked position.

18. The fastener of claim 1, wherein the first portion has a shank having one of opposite ends thereof provided with a head dimensioned to be larger than an outer

dimension of the shank, second portion including a head configured to be larger than the outer dimension of the shank and receiving the other end of the shank in the locked position, wherein base surfaces of the heads of the first and second portions abut outer surfaces of the multiple bone fragments.

19. The fastener of claim 18, wherein the head of the second portion is provided with a throughgoing hole configured to guide the other end of the shank so that the base surfaces of the heads are displaced to the locked position, wherein the base surfaces abut the outer surfaces of the bone fragments.

20. The fastener of claim 18, wherein the base surfaces of the heads of the first and second portions each have an array of spikes engaging the outer surfaces of the multiple bone fragments in the locked position of the fastener.

21. The fastener of claim 19, wherein the hole has an inner threaded surface threadingly engaging the other end of the shank, the base surfaces of the heads of the first and second portions being textured.

22. The fastener of claim 1, wherein the first and second portions each have curved cylindrical bodies dimensioned so that the cylindrical body of the second portion is slidingly disposed within and extending through the cylindrical body of the first portion, a distal end of the second portion being enlarged to abut a distal end of the cylindrical body of the first portion.

23. The fastener of claim 22, wherein a proximal end of the cylindrical body of the first portion has an enlarged head abutting an outer surface of one of the bone fragments in the locked position,

wherein the distal end of the first body is forced outwards to abut an outer surface of another one of the multiple fragments in response to a tensile force applied to a proximal end of the second portion.

24. A bone fastener for stabilizing multiple bone fragments, comprising:

a pair of jaws displaceable relative to one another to a locked position of the fastener, wherein inner surfaces of the jaws, opposing one another, are controllably move relative to one another to engage outer surfaces of the multiple bone fragments in a locked position.

25. The fastener of claim 24, wherein the inner surfaces of the jaws each have a plurality of spikes engaging the outer surfaces of the multiple segments.

26. The fastener of claim 24, wherein the first and second jaws move linearly relative to one another, the clamp further having a ratchet mechanism actuating displacement of the jaws towards one another to the locked position of the fastener.

27. The fastener of claim 24, wherein the jaws have proximal ends pivotally coupled with one another to provide displacement of distal ends of the jaws relative to one another between

a rest position, wherein the inner surfaces of the jaws rest against one another, and

the locked position, wherein the distal ends are displaced away from one another to have the inner surfaces engage the outer surface of the multiple bone fragments.

28. The fastener of claim 27, wherein the jaws are resiliently biased towards the rest position, the inner surfaces of the jaws being textured to improve engagement with the opposite sides of the outer surface of the at least one bone fragment in the locked position of the fastener.

29. The fastener of claim 24, wherein proximal ends of the of the jaws are pivotally coupled to one another to provide displacement of distal ends of the jaws relative to one another between

a rest position, wherein the distal ends of the jaws are spaced away from another, and

the locked position, wherein the distal ends of the jaws are displaced toward one another to engage the outer surfaces of the multiple bone fragments.

30. The fastener of claim 29, wherein the inner surfaces of the jaws are located on the distal ends of the jaws and each have a plurality of teeth engaging the outer surfaces of the bone fragments.

31. A bone fastener for stabilizing bone fragments, comprising a body insertable through the bone fragments,

the body being made from a memory shape alloy and having a distal end provided with multiple, angularly spaced recesses defining therebetween a plurality of deformable fingers peelable outwards in response to heat, towards a locked portion, wherein at least one of the fingers locks in at least one of the bone fragments.

32. The fastener of claim 31, wherein the plurality of fingers converge toward one another in a rest position to form a bullet-like shape of the distal end.

33. The fastener of claim 32, wherein the body has an enlarged proximal end shaped to abut an outer surface of one of the bone fragments in the locked position of the fastener.

34. The fastener of claim 32, wherein the body of the fastener has a recessed proximal end formed with a plurality of deformable leafs displaceable outwards to engage an outer surface of one of the bone fragments in the locked position of the fastener in response to heat.

35. A bone fastener for stabilizing bone fragments, comprising a cylindrical body having an elongated spike having a diameter smaller than the cylindrical body and projecting outwardly from a distal end of the cylindrical body, and an enlarged head formed at a proximal end thereof.

36. A method for operating a bone fastener used for stabilizing bone fragments, comprising the steps of:

displacing a first portion of the bone fastener through one of the bone fragments;

displacing a second portion of the of the bone fastener through the bone fragments so as to engage the first and second portions of the fastener; and

displacing the first and second engaged portions relative to one another to a locked position, wherein the bone fragments are secured by the locked in fastener.

37. A method for stabilizing facets of adjacent superior and inferior vertebrae, comprising the steps of:

advancing a first portion of a bone fastener from an inferior articular process of the superior vertebra, through a facet joint and on into a superior articular process of the inferior vertebra;

guiding a second portion of the bone fastener towards the first portion so as to engage the first and second portions; and

displacing the first and second engaged portions of the bone fastener relative to one another to lock the inferior and superior articular processes of the adjacent vertebra.

38. The method of claim 37, wherein the step of insertion of the first portion is controllably stopped at a base of the superior articular process short of an entry point into a pedicle.

39. A method for stabilizing facets of adjacent superior and inferior vertebrae, comprising the steps of pivotally displacing jaws of a bone clamp relative to one another to a locked position, wherein inner surfaces of the jaws clamp a posterior surface of inferior articular process of the superior vertebra and an anterior lateral surface of superior articular process of the inferior vertebra.

40. An instrumentation kit for use in stabilizing bone fragments, comprising:

a first plurality of bone fasteners, each being configured to extend through the

bone fragments and including a first and second portions shaped and dimensioned to initially engage and further move relative to each other to a locked position, wherein the bone fastener is locked in the bone fragments;

a second plurality of bone fasteners, each being configured to have a pair of jaws pivotal relative to one another about joined proximal ends thereof to the locked position, wherein inner surfaces of distal ends of the jaws clamp outer surfaces of the bone segments;

a third plurality of fasteners each made from a memory shape alloy and having at least one of opposite ends formed with a plurality of deformable webs, whereas, as the bone fastener of the third plurality moves through the bone fragments to the locked position, the deformable fingers are peeled away to engage an inner surface of at least one of the bone segments in response to heat applied to the fasteners; and

a fourth plurality of bone fasteners, each being configured to have a respective pair of jaws linearly displaceable relative to one another the locked position, wherein inner surfaces of distal ends of the jaws clamp outer surfaces of the bone fragments.